

NEW SPECIES OF ANTHURIDEANS FROM THE COOK  
AND FIJI ISLANDS (CRUSTACEA:  
ISOPODA: ANTHURIDEA)

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*Abstract.*—Seven new anthuridean isopod species are reported from the Fiji and Cook islands. These include five anthurids, viz. *Apanthura mana*, *Mesanthura childi*, *Natalanthura fijiensis*, *Panathura collaris*, *Pendanthura rarotonga*, and two paranthurids, *Paranthura astrolabium* and *Paranthura melanesica*.

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During July–August 1978, Mr. C. A. Child of the Smithsonian Institution spent ten days doing shallow-water collecting in the Cook and Fiji islands. Various habitats, including coral and calcareous algal rubble, and algal mats were sampled and a total of 34 anthuridean specimens collected. These anthurideans proved to belong to seven species, all of which are new. This is hardly surprising, as the only reports of anthurids from the central Pacific are those of Miller and Menzies (1952) from Hawaii (whose report deals with four new species) and Stebbing (1900) who described two new species from the Loyalty Islands. These reports of new species indicate how poorly the central Pacific has been collected, and also support the idea that although genera are often widespread, anthuridean species in shallow water habitats tend to have restricted geographical ranges.

Family Anthuridae

*Apanthura mana*, new species

Figs. 1–2

*Description.*—♀. Integument not indurate, lacking pigmentation. Body proportions:  $C < 1 > 2 > 3 < 4 < 5 > 6 > 7$ . Cephalon with low rostral point barely extending beyond rounded anterolateral corners; eyes small, dorsolateral. Pereonites 4, 5, and 6 each with shallow middorsal pit. Pleonites 1–5 fused; 6 free, with posterodorsal margin convex. Telson dorsally evenly convex, proximal half parallel-sided, distal half tapering to bluntly rounded setose apex, with narrow hyaline margin; 2 large basal statocysts present.

Antennular peduncle 4-segmented, basal segment subequal to 3 distal segments together; flagellum of 2 articles. Antennal peduncle 5-segmented, second segment strongly grooved to accommodate antennule; flagellum of 3 articles, 2 distal articles tiny. Mandibular palp 3-segmented, distal segment

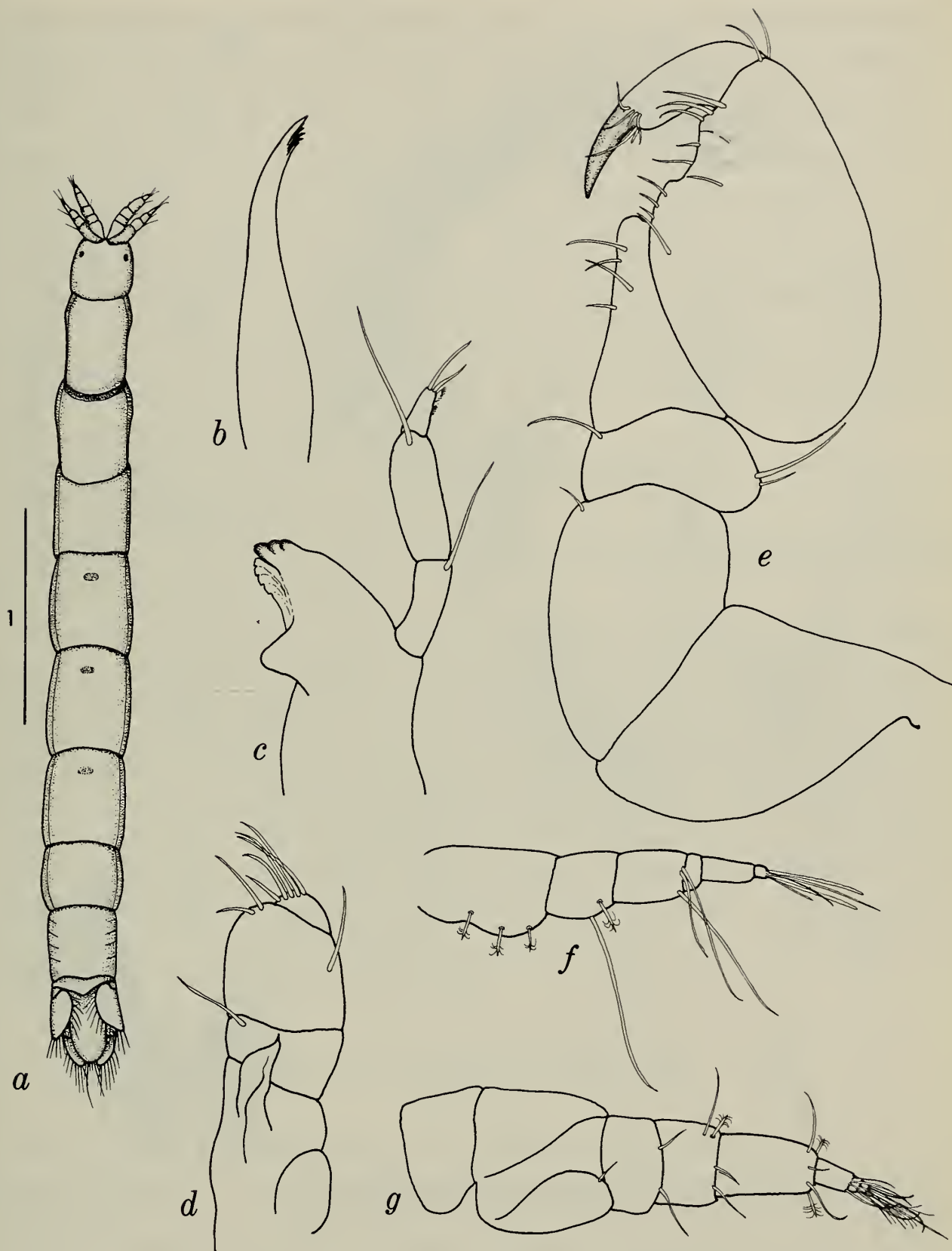


Fig. 1. *Apanthura mana*: a, Female in dorsal view; b, Maxilla; c, Mandible; d, Maxilliped; e, Pereopod 1; f, Antennule; g, Antenna.

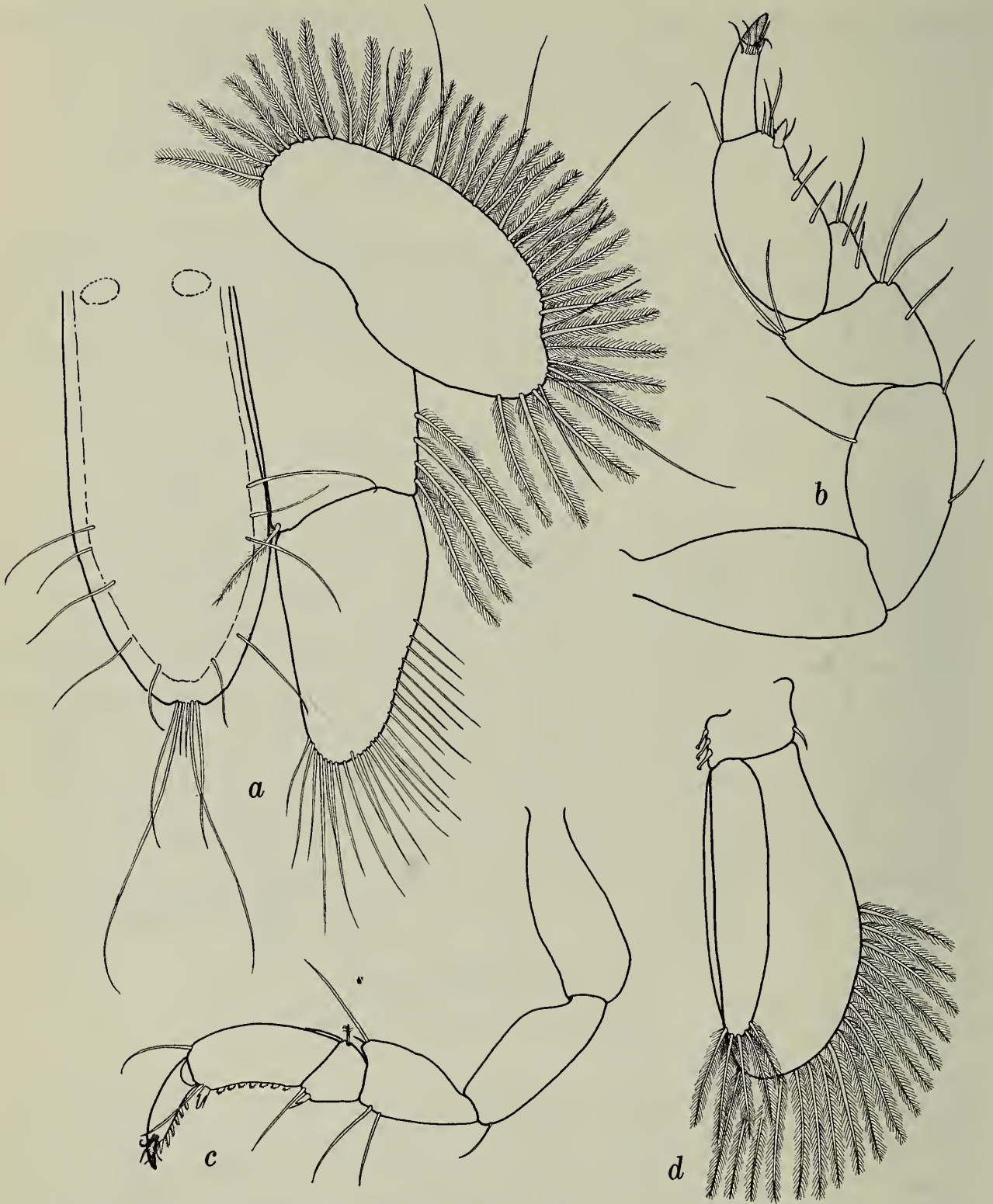


Fig. 2. *Apanthura mana*: a, Telson and uropod; b, Pereopod 2; c, Pereopod 7; d, Pleopod 1.

with 2 terminal setae; segment 2 almost 3 times length of segment 3; incisor of 3 cusps; lacinia with 4 serrations; molar bluntly rounded. Maxilla with 6 distal spines. Maxilliped 5-segmented, terminal segment set obliquely at outer distal corner of segment 4, with 5 simple setae; thin-walled endite on inner surface almost reaching end of segment 3. Pereopod 1 subchelate,

unguis slightly more than half length of rest of dactylus; propodus expanded, palm with slight notch at midpoint and few simple setae; carpus triangular, distally rounded. Pereopod 2 unguis about one-third length of rest of dactylus; propodus with strong serrate sensory spine at posterodistal angle. Pereopods 4–7, posterior margins of propodi and dactyli with fringed scales; propodi serrate sensory spine at posterodistal angle; carpi triangular, with short anterior margin, short sensory spine at posterodistal angle. Pleopod 1 exopod operculiform, with numerous distal plumose setae, endopod somewhat shorter than and one-third width of exopod, with 5 distal plumose setae; basis with 3 retinaculae. Uropodal exopod elongate/oval, just reaching endopod, with slight subapical notch in outer margin, numerous marginal plumose setae and few simple setae; endopod reaching beyond telsonic apex, tapering to broadly rounded setose apex.

*Etymology*.—The species was collected off Mana Island in the Fiji group, hence the specific name.

*Material*.—Holotype, USNM 172271, ♀, 3.9 mm. Paratypes, USNM 172272, 2 ♀, 3.2 mm, 3.9 mm. Mana Island, Fiji; taken from coral rubble in 1 m water on fringing reef.

*Remarks*.—The genus *Apanthura*, containing as it does many very similar species, undoubtedly requires revision. Differences between species of *Apanthura* are usually subtle, and in the present case, several species agree with *A. mana* in numerous features. *A. sandalensis* Stebbing from the Loyalty Islands is a larger species (7 mm) with a strongly notched uropodal exopod. *A. inornata* Miller and Menzies from Hawaii is of similar size (3.75 mm) but has a more strongly notched propodal palm of pereopod 1, and the uropodal exopod is relatively broader. Miller and Menzies (1952:4, fig. 1f) mention and figure a “single toothed bristle in the setal row” of the mandible of *A. inornata*. This is an extremely unusual feature and would make the Hawaiian species unique in this regard.

#### *Mesanthura childi*, new species

Figs. 3–4

*Description*.—♀. Integument not indurate. Body proportions: C = 1 > 2 < 3 < 4 = 5 > 6 > 7. Cephalon with low rostrum not extending beyond anterolateral corners; large middorsal pigment patch; small dorsolateral eyes present. Pigment pattern: 2 proximal patches on pereonites 1 and 2, 3 on pereonite 3, 2 distal patches on pereonites 4–7, 2 patches overlapping pleonites 5 and 6. Telson widest at about midpoint, apex broadly rounded with cluster of simple setae; 2 large proximal statocysts present.

Antennular peduncle 4-segmented, basal segment slightly shorter than 3 distal segments together; flagellum of 2 articles, terminal article with 3 aesthetascs. Antennal peduncle 5-segmented, segment 2 grooved to accommo-

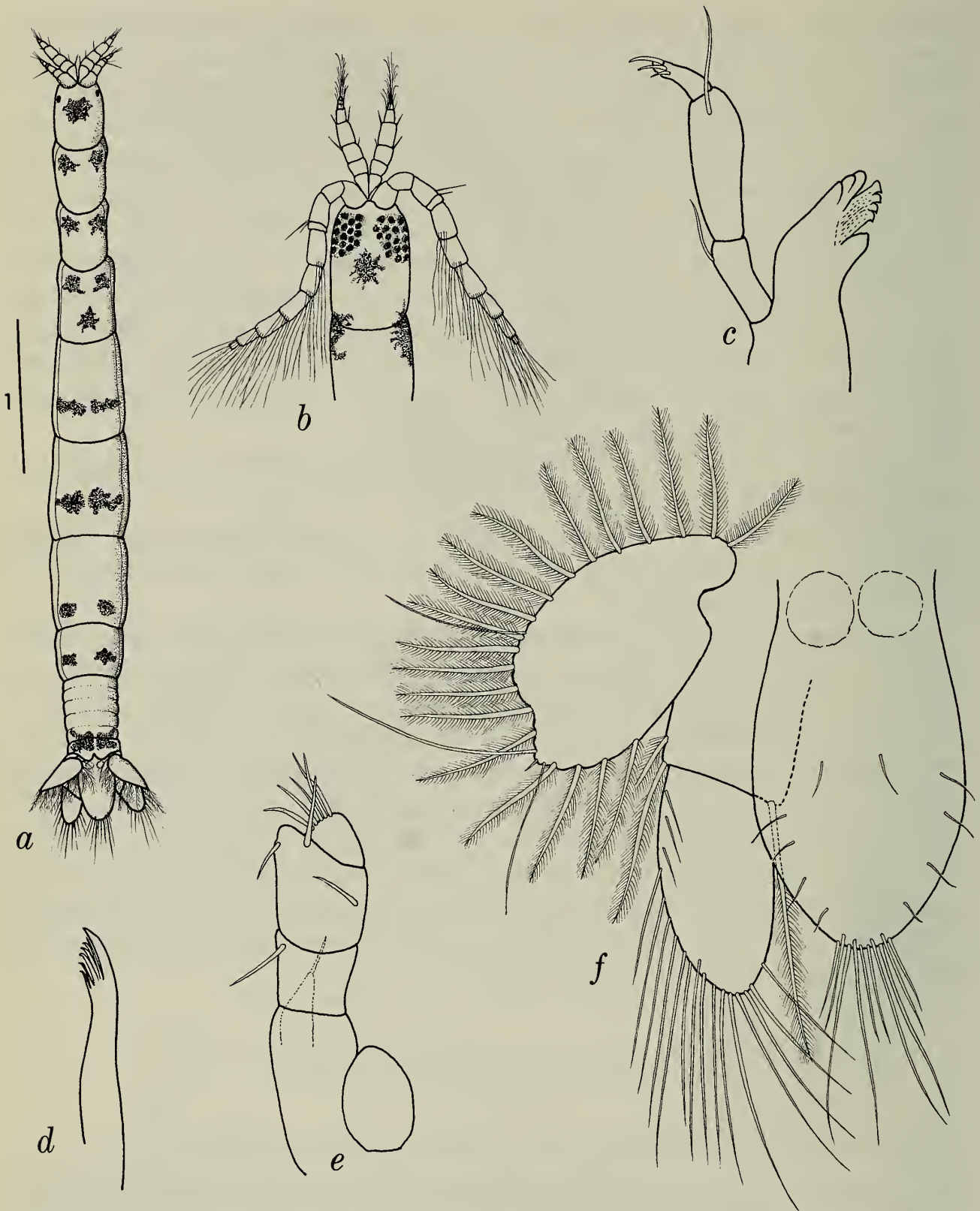


Fig. 3. *Mesanthura childi*: a, Female in dorsal view; b, Cephalon of male; c, Mandible; d, Maxilla; e, Maxilliped; f, Telson and uropod.

date antennule; flagellum of 2 articles. Mandibular palp 3-segmented, segment 2 twice length of terminal segment; latter with 3 distal spines; incisor with 3 rounded cusps; lacinia with 4 teeth; molar bluntly rounded. Maxilla with 1 strong and 6 smaller distal spines. Maxilliped 5-segmented, terminal

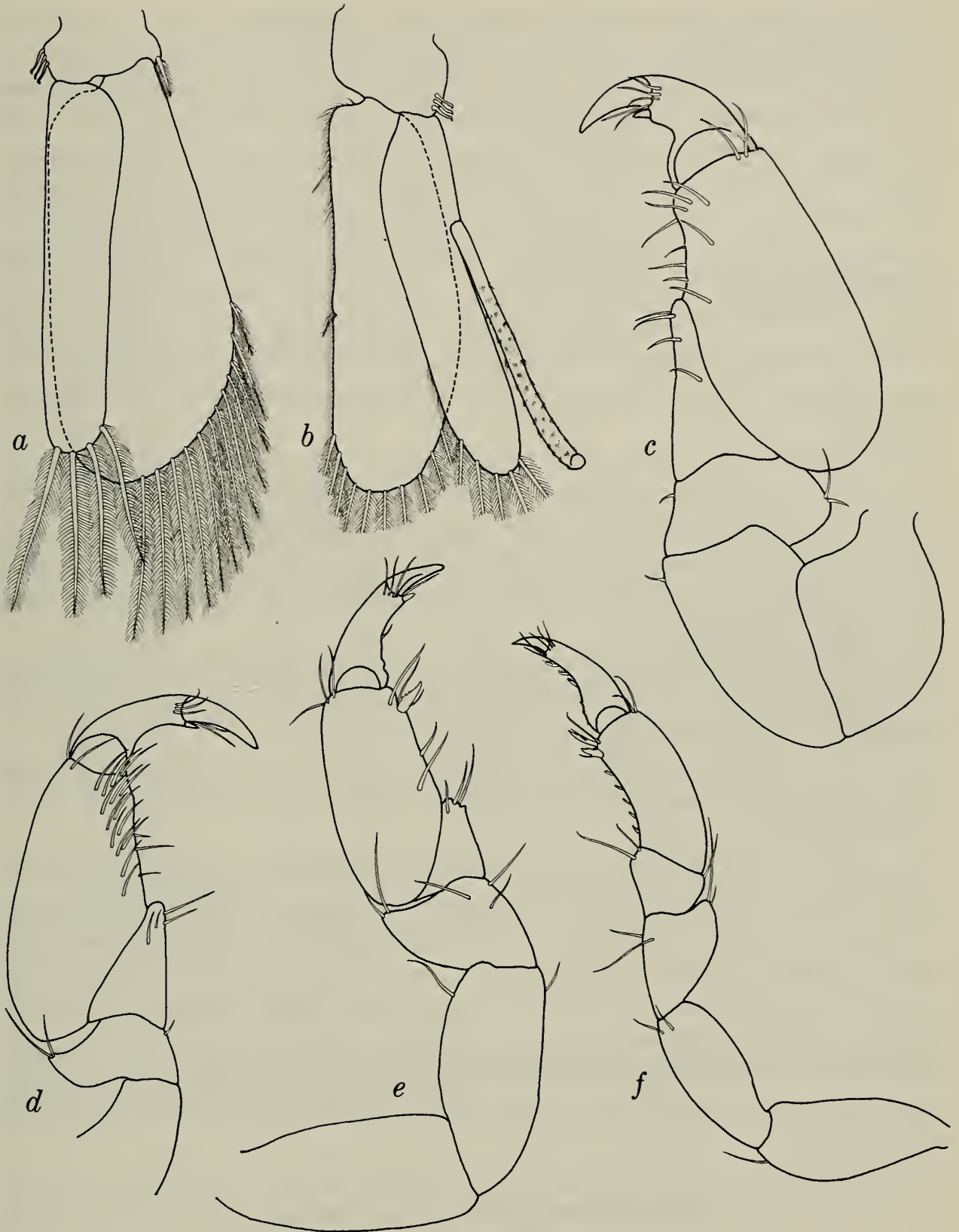


Fig. 4. *Mesanthura childi*: a, Pleopod 1; b, Pleopod 2 ♂; c, Pereopod 1 ♀; d, Pereopod 1 ♂; e, Pereopod 2; f, Pereopod 7.

segment with 5 setae, set at outer distal corner of segment 4; endite on inner surface reaching to middle of segment 3, with single terminal seta. Pereopod 1 subchelate; unguis one-third length of dactylus, with short accessory spine

at base; propodal palm slightly concave, with few simple setae; carpus triangular, distally rounded, with few simple setae. Pereopod 2 propodus barely expanded proximally, with strong serrate sensory spine at posterodistal corner. Pereopods 4–7 unguis about one-third length of dactylus, latter with few fringed scales on posterior margin; propodus with 2 serrate sensory spines at posterodistal corner, several fringed scales on posterior margin; carpus triangular, anterior margin shorter than posterior margin. Pleopod 1 exopod operculiform, with plumose setae on distal margin; endopod about one-third width of and almost as long as exopod, with 4 distal plumose setae; basis with 3 retinaculae. Uropodal exopod oval, with shallow notch in distal margin, reaching beyond basis, with numerous marginal plumose setae; endopod distally rounded, with numerous simple setae; reaching beyond telsonic apex.

♂. Cephalon with eyes much larger than ♀. Antennular flagellum elongate, of 6 articles bearing filiform aesthetascs. Pigment pattern similar to ♀ but more diffuse, extending onto ventral surface. Pereopod 1 unguis half length of dactylus; propodal palm straight, with numerous setae on inner surface. Pleopod 2 copulatory stylet on endopod extending beyond both rami, distally rounded.

*Etymology*.—The species is named for Mr. C. A. Child of the Department of Invertebrate Zoology, Smithsonian Institution, who collected the entire anthurid collection described in this paper.

*Material*.—Holotype, USNM 172273, ♀, 3.0 mm; Allotype, USNM 172274, ♂, 2.6 mm. Mana Island, Fiji; taken from coral rubble in 1 m water on fringing reef.

*Remarks*.—*Mesanthura childi* is one of the smallest species of this genus yet recorded. The development of the copulatory stylet of the male indicates that these are mature specimens. Only two species of *Mesanthura* have been recorded from the Pacific, viz. *M. occidentalis* Menzies and Barnard, from southern California, and *M. hieroglyphica* Miller and Menzies, from Hawaii. Neither of these possess a pigment pattern at all similar to the present species. Since pigment pattern is regarded as fairly constant and species-distinct in *Mesanthura* the present material must be seen as hitherto undescribed.

*Natalanthura fijiensis*, new species

Figs. 5–6

*Description*.—♀. Integument moderately indurate, strongly pitted. Anterolateral corners of cephalon extending slightly beyond low rostrum, eyes well developed, pigmented. Pereonites dorsally and laterally pitted. Body proportions: C < 1 < 2 > 3 < 4 = 5 > 6 > 7. Pleonites 1–5 fused, with transverse rows of pits marking lines of fusion; pleonite 6 indistinguishably

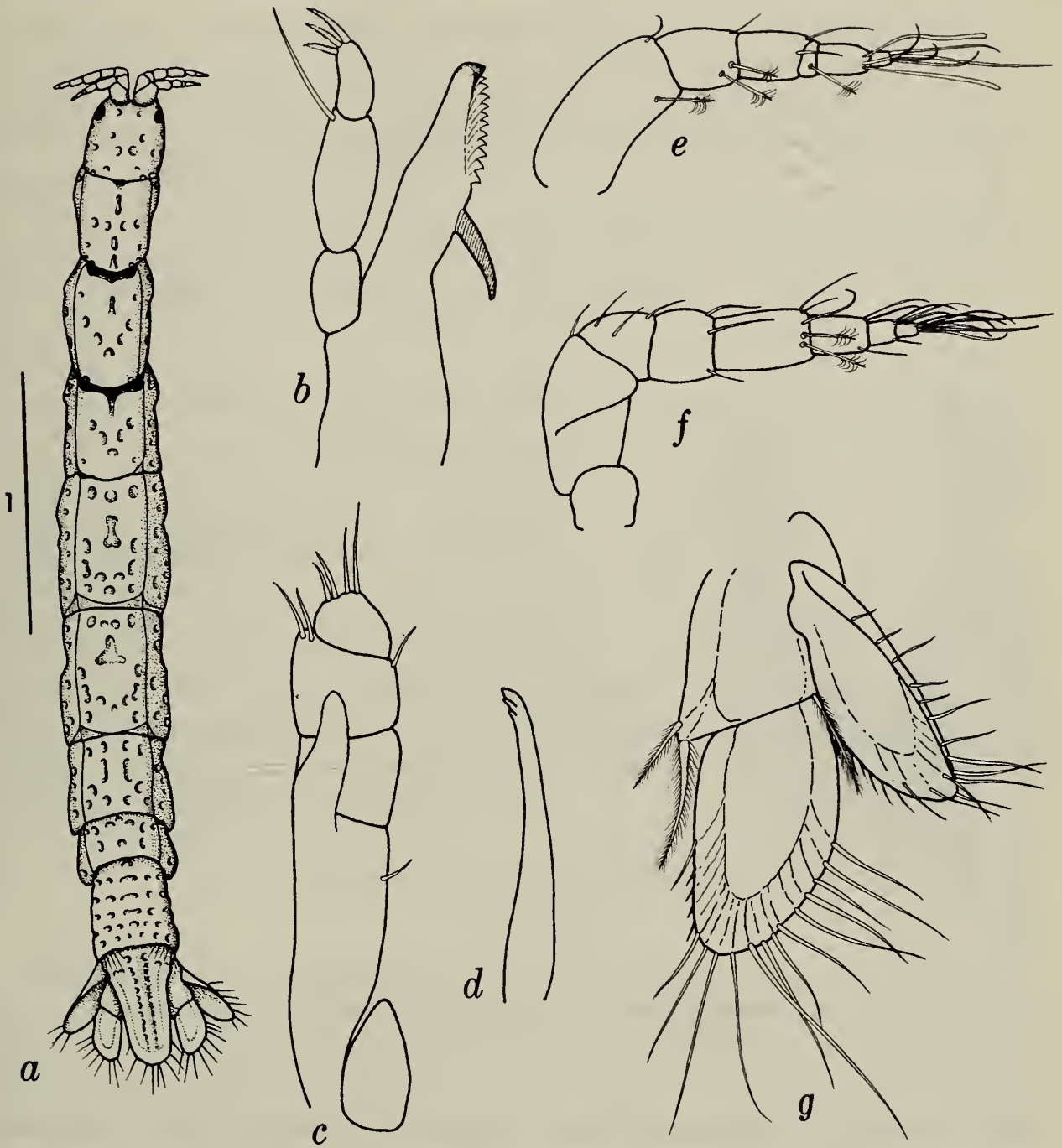


Fig. 5. *Natalanthura fijiensis*: a, Holotype in dorsal view; b, Mandible; c, Maxilliped; d, Maxilla; e, Antennule; f, Antenna; g, Uropod.

fused with telson. Telson distally evenly rounded, with strong longitudinal mediodorsal ridge flanked by pits; margin entire; statocysts difficult to detect, probably present.

Antennular peduncle 4-segmented; flagellum of 2 articles. Antennal peduncle 5-segmented, segment 2 grooved to accommodate antennule; flagellum of 3 articles. Mandibular palp 3-segmented, middle segment about twice length of distal segment; latter with 3 distal fringed spines; incisor of 2 blunt cusps; lacinia narrow, with 11 serrations; molar spike-like, elongate, finely ridged. Maxilla slender, with 4 distal spines. Maxilliped 5-segmented, seg-



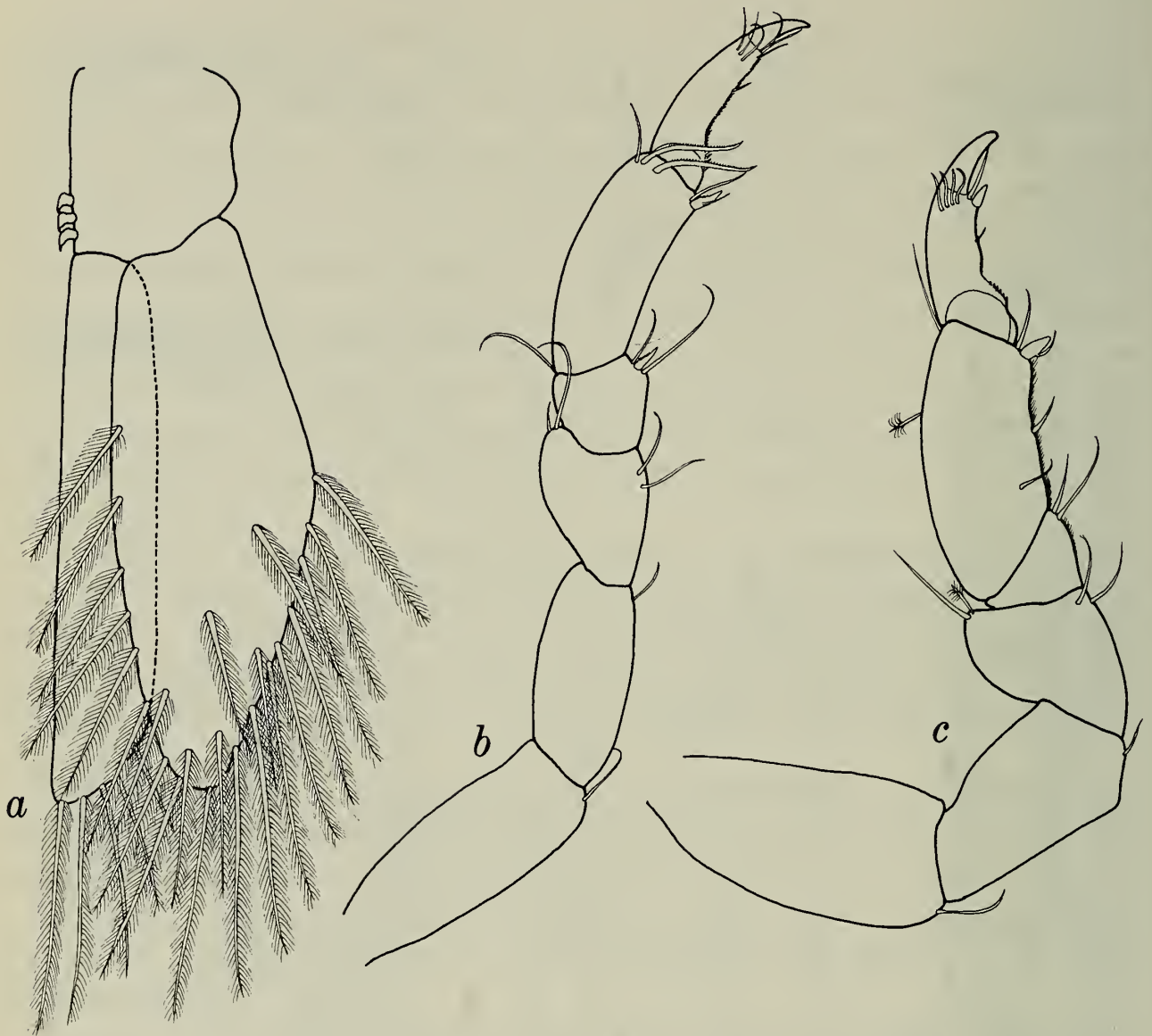


Fig. 6. *Natalanthura fijiensis*: a, Pleopod 1; b, Pereopod 7; c, Pereopod 1.

ment 2 relatively elongate, terminal segment semicircular, with 4 distal simple setae; endite on internal surface extending to midlength of segment 4. Pereopod 1 not differing markedly from following pereopods; only slightly more robust; unguis about half length of dactylus, with strong spine at base; propodus with strong posterodistal sensory spine; carpus short, triangular. Pereopods 4–7 propodus slightly more slender than in anterior pereopods, with strong posterodistal sensory spine and 2 elongate fringed spines distally; carpus roughly triangular, with short anterior margin, sensory spine posterodistally. Pleopod 1 basis with 3 retinaculae; endopod subequal in length and about half width and slightly overlapped by exopod; both rami with several elongate plumose setae, together forming operculum. Uropodal exopod elongate/oval, with simple marginal setae; basis shorter than endopod; latter elongate/oval, with relatively elongate marginal simple setae; both rami with broad hyaline entire margin.

*Etymology*.—The species is named for the Fiji Islands group, whence it was collected.

*Material*.—Holotype, USNM 172275, ♀, 3.4 mm. South-west coast of Viti Levu, Fiji; taken from coral rubble from lagoonal shallows behind barrier reef, in 1 m of water.

*Remarks*.—The present species may easily be separated from the two previously described species by the pattern of dorsal integumental pits, but also by several other characters tabulated below:

Table

	<i>N. fijiensis</i>	<i>N. natalensis</i> (Kensley, 1978)	<i>N. sp. (Belize)</i> (Kensley, in press, a)
Pereopod 7	Present	Present	Absent
Antennular flagellum articles	2	3	3
Antennal flagellum articles	3	6	7
Lacinia serrations	11	12	7
Telsonic margin	Entire	Serrate	Entire

Both the present species and *Natalanthura* sp. from Belize were taken from shallow-water coarse coral reef sediments consisting mainly of coral rubble, while the Natal species was taken from much deeper water, but also from coarse sediments of animal origin.

*Panathura collaris*, new species

Figs. 7–9

*Description*.—♀. Integument thin, not indurate. Body proportions:  $C < 1 > 2 < 3 = 4 = 5 > 6 > 7$ . Cephalon with U-shaped band of red-brown pigment dorsally; eyes dorsolateral. Pereonite 7 with posterolateral lobes overlapping anterior pleonites laterally. Pleonites free, 1–4 short, subequal; pleonite 5 twice length of pleonite 4, with fringe of dorsolateral plumose setae; pleonite 6 twice length of 5, with rounded middorsal lobe on posterior margin. Telson distally broadly and evenly rounded, with broad hyaline margin, dorsal surface faintly concave, with scattered short setules, ventral surface convex; distal margin with several elongate simple setae.

Antennular peduncle 4-segmented, basal segment broad, as long as remaining segments together; flagellum of single article, bearing elongate simple setae. Antennal peduncle 5-segmented, segment 2 longest and broadest; flagellum of 2 short setiferous articles. Mandibular palp 3-segmented, middle segment about twice length of segments 1 and 3; latter with 4 distal fringed spines; incisor of 3 cusps; lacinia with 4 large serrations and several fine proximal spinules; molar lacking. Maxilla slender, tapering distally with 1 strong and 4 smaller spines. Maxilliped 6-segmented, with large endite reaching to segment 5; segment 2 short; 4 simple setae and short fringed

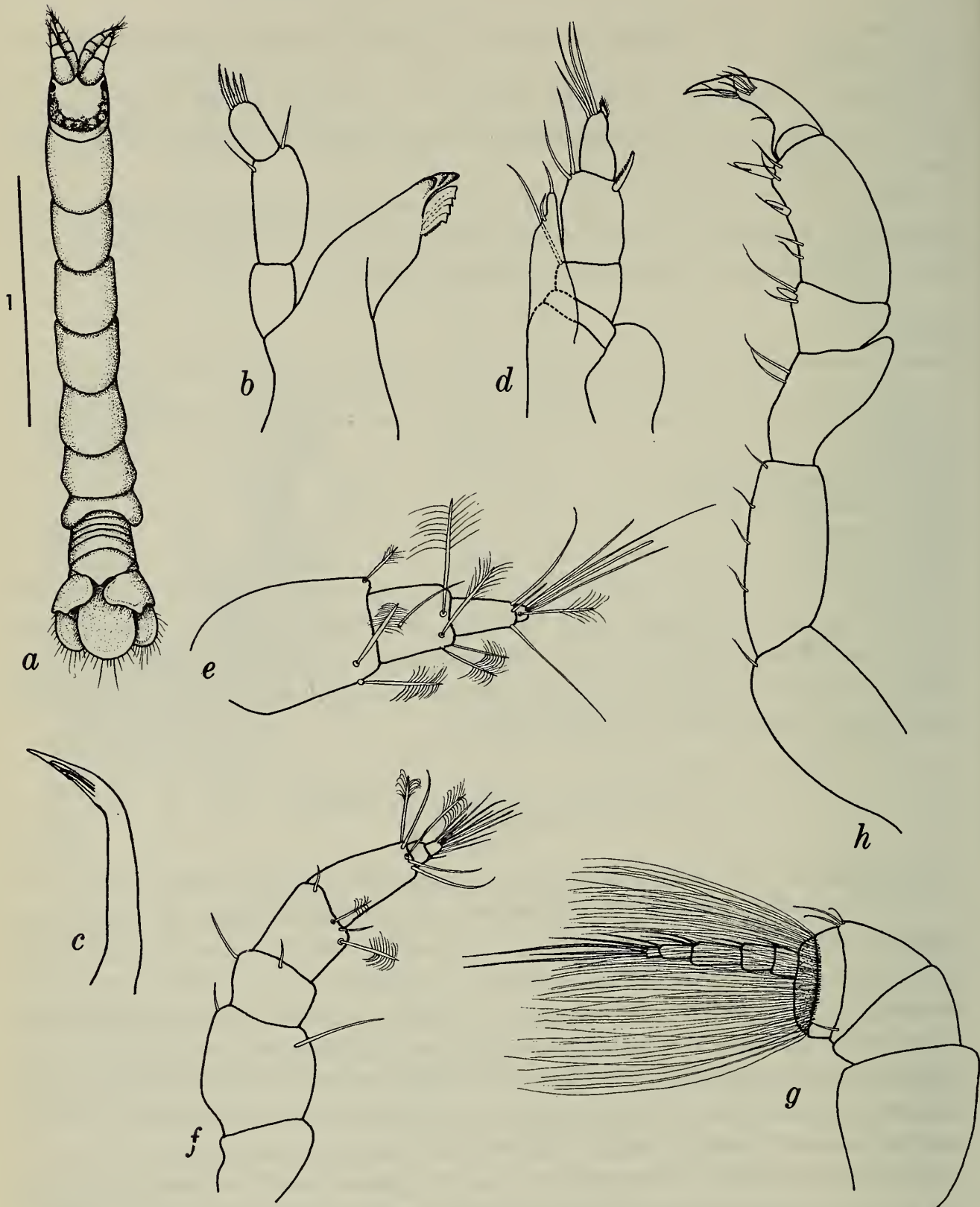


Fig. 7. *Panathura collaris*: a, Female in dorsal view; b, Mandible; c, Maxilla; d, Maxilliped; e, Antennule ♀; f, Antenna; g, Antennule ♂; h, Pereopod 7.

scale distally on terminal segment. Pereopod 1 unguis almost one-quarter length of entire dactylus; propodus broad, palm straight, with thin transparent margin produced into triangular process proximally; strong fringed spine on inner surface near dactylar articulation; carpus triangular, with thin

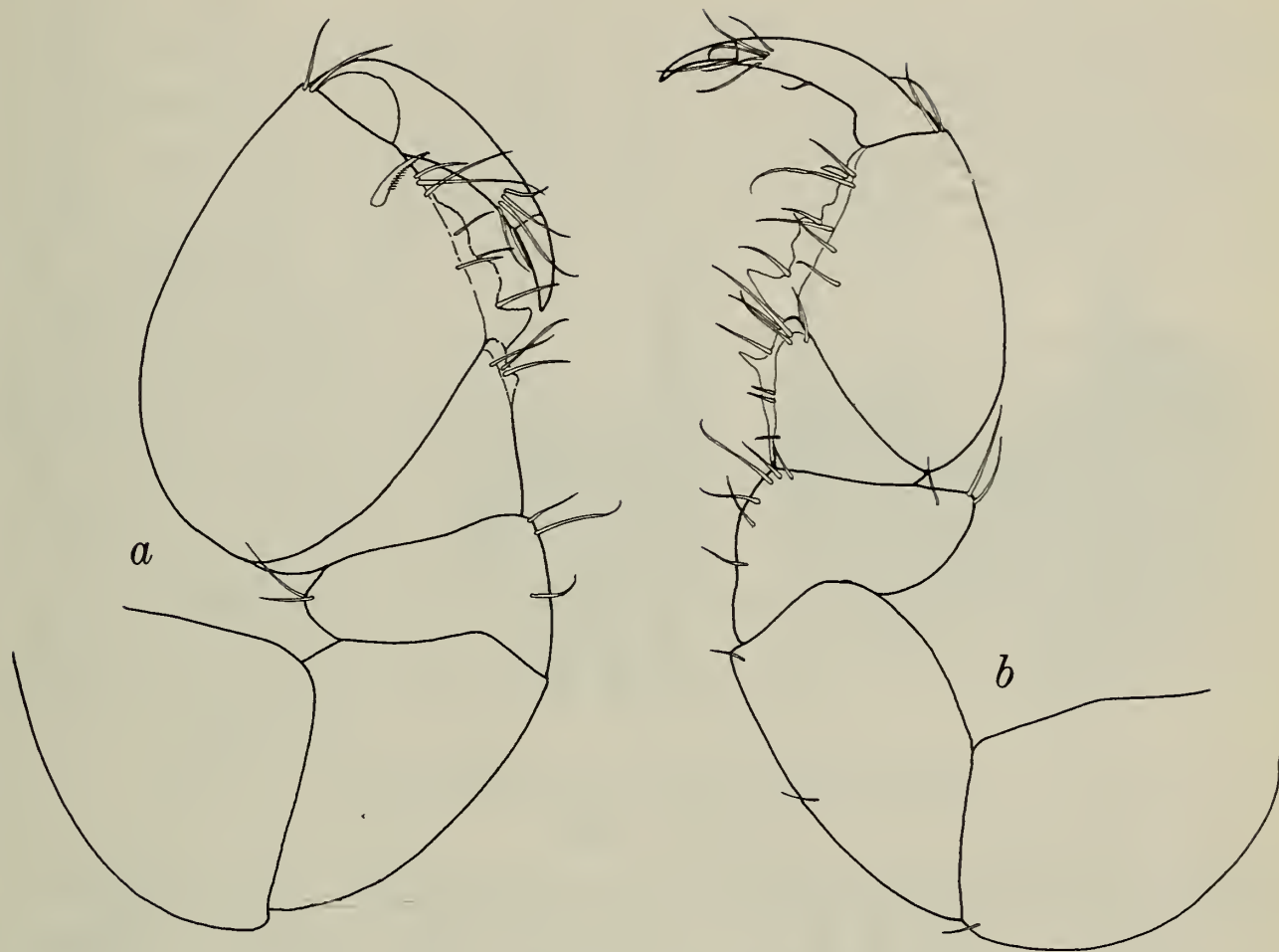


Fig. 8. *Panathura collaris*: a, Pereopod 1; b, Pereopod 2.

rounded process distally. Pereopod 2 similar to 1, but less robust. Posterior pereopods with propodus having 2 stout sensory spines on posterior margin; carpus roughly triangular, an anterior margin short, posterior margin with single sensory spine. Pleopod 1 exopod operculiform, 3 times wider than endopod, both rami with elongate plumose setae on distal margins. Uropodal exopod with rounded lateral margins, and notch in distal margin; broad hyaline border present; few elongate distal setae; endopod oval, with broad hyaline border and several simple setae; basis with row of plumose setae on medial margin.

♂. Eyes much larger than in ♀. Antennule with stout peduncular segments; basal flagellar article broad, followed by 5 narrower articles bearing whorls of filiform aesthetascs. Pereopod 1 as in ♀. Pleopod 2 exopod as long as but broader than endopod, with distinct transverse suture; copulatory stylet on endopod extending well beyond rami, apically rounded. Uropodal exopod oval, much smaller than in ♀.

*Etymology*.—The specific name is from the Latin 'collo'—a collar, and refers to the collar-like band of pigment on the dorsal cephalon.

*Material*.—Holotype, USNM 172267, ovigerous ♀, 2.3 mm; Allotype,

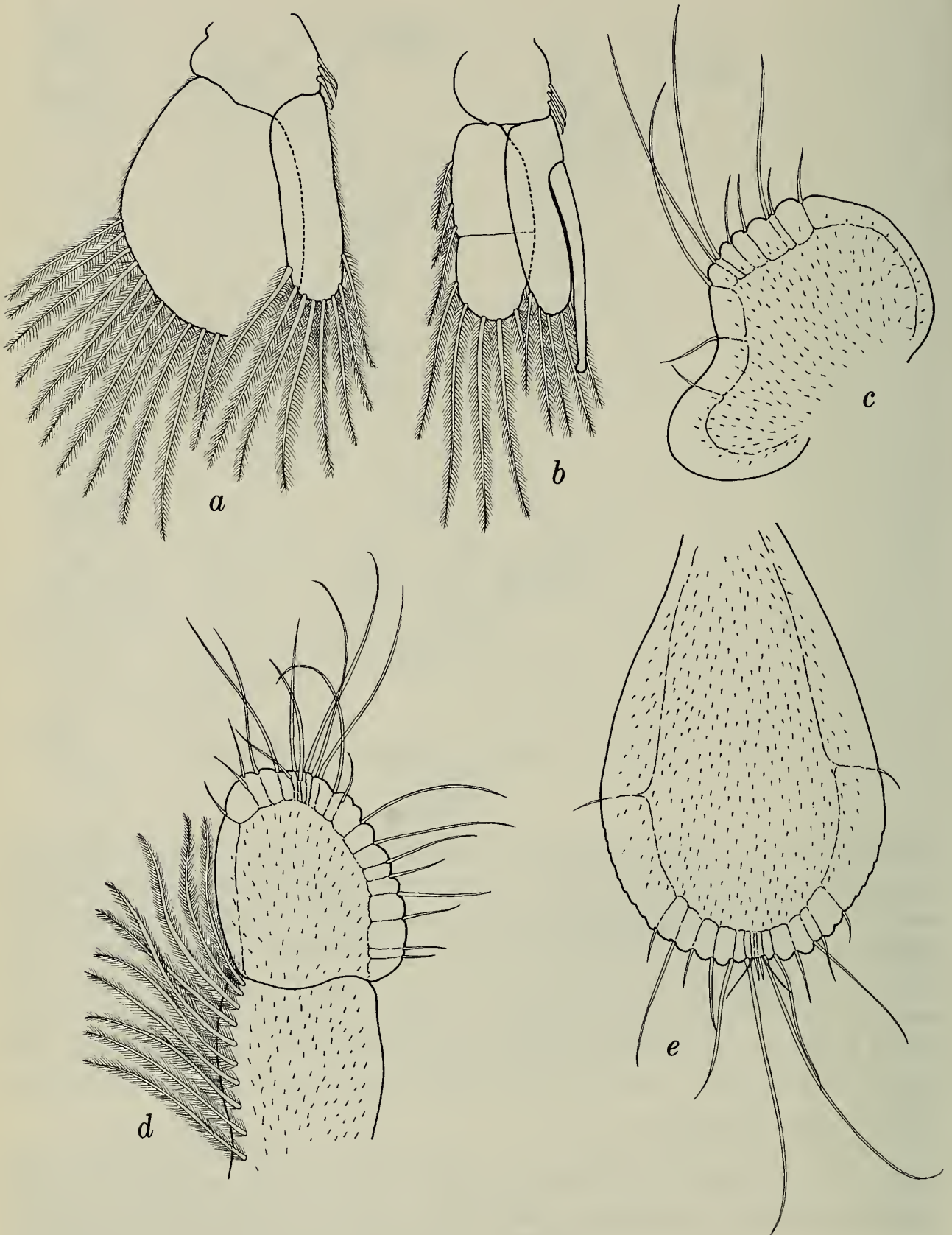


Fig. 9. *Panathura collaris*: a, Pleopod 1; b, Pleopod 2 ♂; c, Uropodal exopod; d, Uropodal endopod and basis; e, Telson.

USNM 172277, ♂, 2.4 mm. South of Suva Point, Viti Levu, Fiji; taken from coral rubble in reef shallows in 1–3 m of water. Paratypes, USNM 172278, 2 ovigerous ♀, 1 ♀, 1 ♂; taken from coral rubble, Mana Island, Fiji, in 1 m of water. USNM 172279, 4 ♀, 2 juvs; Rarotonga Island, Cook Islands; taken from rubble and algae in 1 m of water. USNM 172280, 4 ♀, 1 juv; Rarotonga, Cook Islands; taken from coarse sediment behind barrier reef in 1 m of water.

*Remarks.*—The present species bears a striking resemblance to *P. macronesia* Kensley (in press, b) from Mauritius and Madagascar, especially in the structure of the mouthparts, pereopods, pleopods, uropods, and telson. A few subtle differences, however, do separate the two species. These include pleopod 1 in which the exopod is relatively broader, the endopod carries more plumose setae, and the plumose setae of both rami are relatively longer in the Pacific species. The uropodal exopod of *P. macronesia* has a more distinct point on the distal margin than does *P. collaris*, while the uropodal basis in *P. macronesia* has fewer plumose setae.

*Pendanthura rarotonga*, new species

Figs. 10–11

*Description.*—♀. Integument moderately indurate, with faint scattered smudges of pigment. Body proportions: C < 1 > 2 > 3 > 4 < 5 > 6 > 7. Cephalon with prominent rostrum extending beyond anterolateral lobes. Eyes dorsolateral. Brood pouch formed by 3 pairs of oostegites on pereonites 3–5. Pleonites 1–5 fused; 6 free, with fringe of plumose setae. Telson basally broad, with 2 large statocysts in proximal half, distally evenly rounded. Antennular peduncle 3-segmented, basal segment longest; flagellum of 3 short articles. Antennal peduncle 5-segmented; flagellum of 1 short article. Mandibular palp reduced to small papilla bearing 1 terminal and 1 subterminal simple seta; incisor of 3 rounded cusps; lacinia with 8 marginal serrations; molar process triangular. Maxilla slender, with single strong terminal spine and 7 small spines. Maxilliped 3-segmented, terminal segment with 6 simple setae on distal margin; thin-walled endite tipped with single seta.

Pereopod 1 unguis more than half length of dactylus, with strong spine at base; propodus proximally broad, palm sinuous, with few simple setae; group of 8 fringed spines on inner distal surface; carpus short, triangular. Pereopod 2 far less robust than pereopod 1, propodus with strong posterodistal fringed sensory spine. Posterior pereopods, propodus with fringed scales on posterior margin, strong sensory spine posterodistally; carpus triangular, with short anterior margin. Pleopod 1 exopod operculiform, as long as endopod, both with plumose setae marginally, reaching to distal margin of basis; endopod oval, with simple and plumose setae.

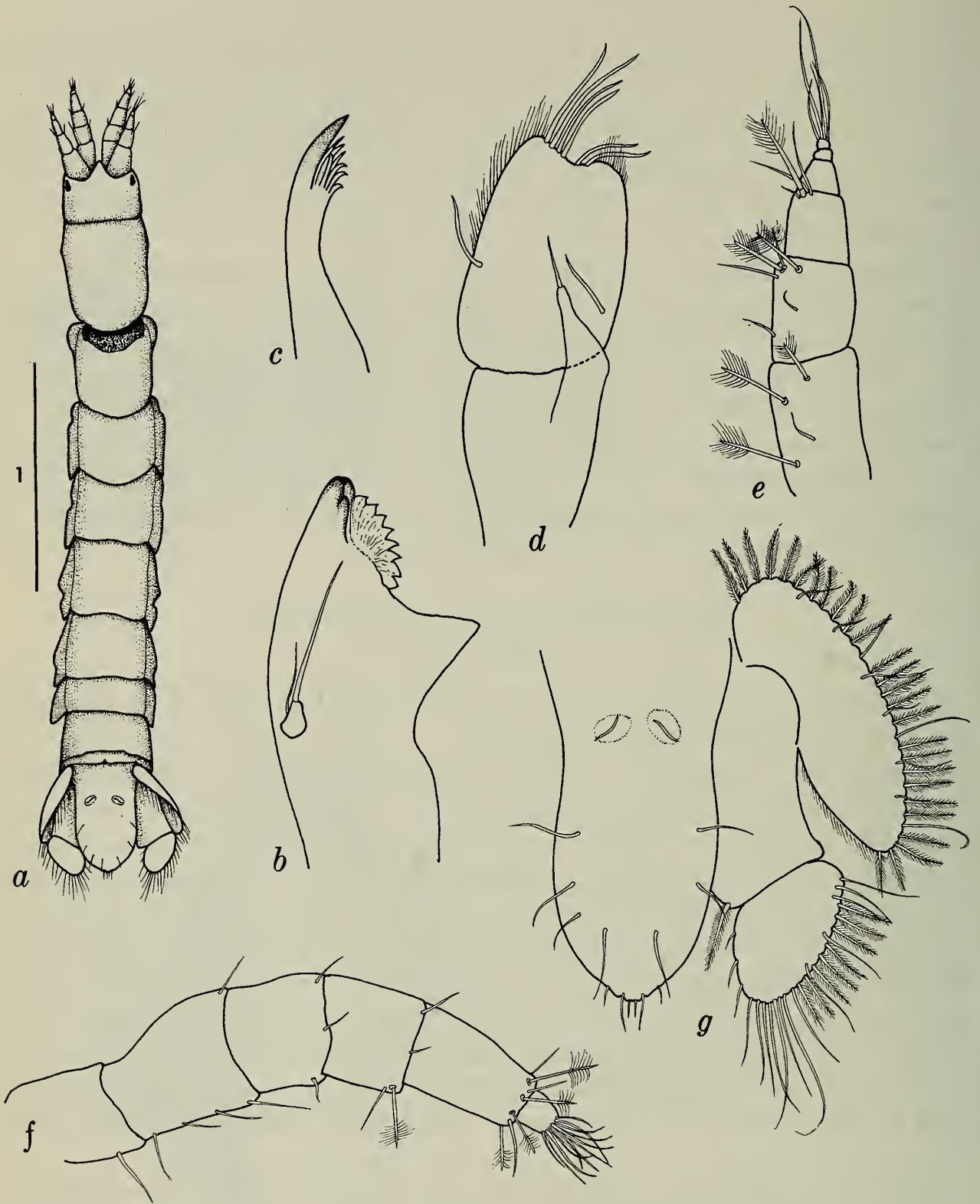


Fig. 10. *Pendantura rarotonga*: a, Female in dorsal view; b, Mandible; c, Maxilla; d, Maxilliped; e, Antennule; f, Antenna; g, Telson and uropod.

*Etymology*.—The species is named for Rarotonga Island in the Cook Island group, where it was collected.

*Material*.—Holotype, USNM 172281, ovigerous ♀, 3.2 mm; Paratypes, USNM 172282, ovigerous ♀, 3.0 mm, 2 ♀, 2.0–2.5 mm; taken from coarse coral sand and algal scrapings in 1 m of water, Rarotonga Is., Cook Islands.

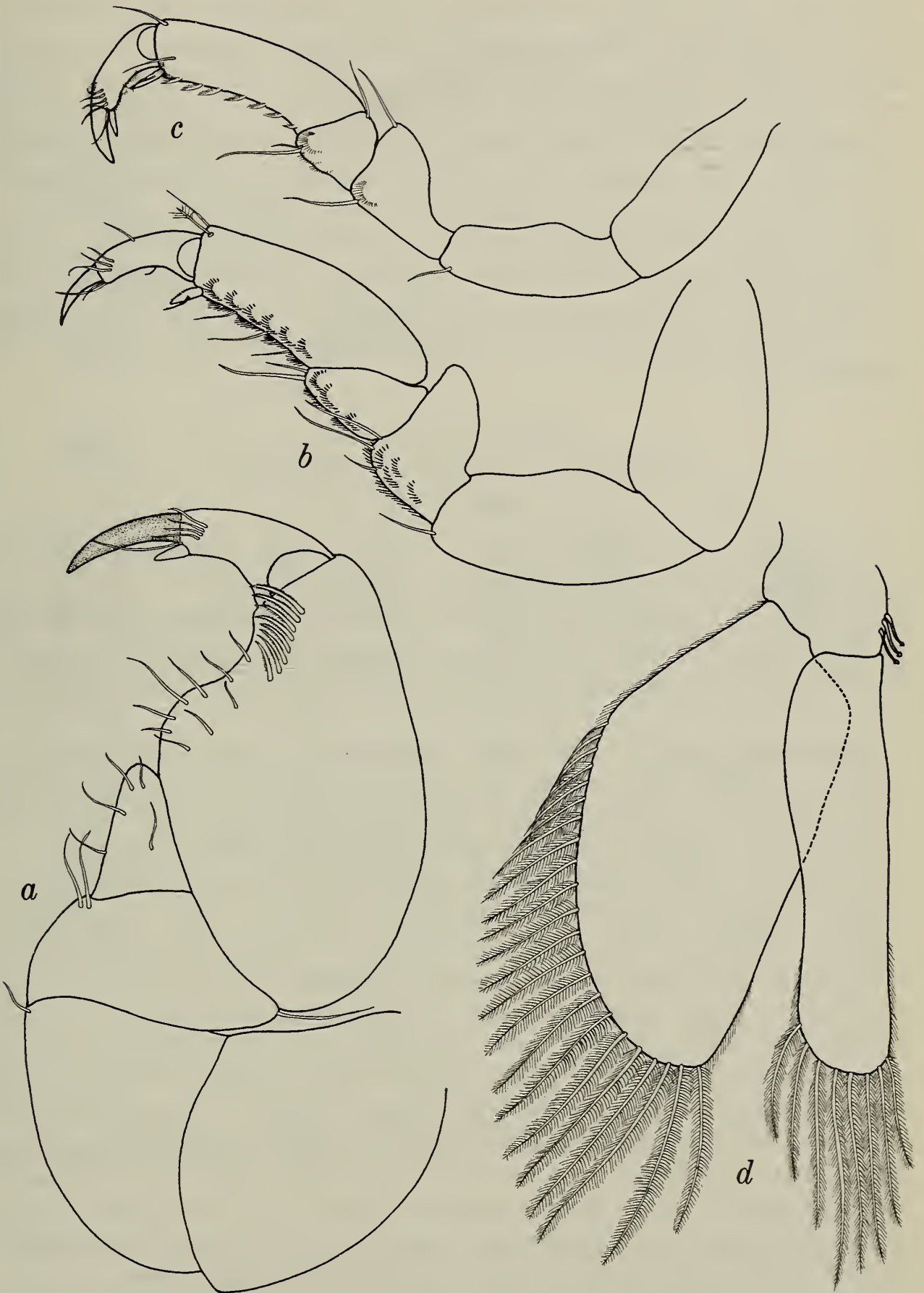


Fig. 11. *Pendanthura rarotonga*: a, Pereopod 1; b, Pereopod 2; c, Pereopod 7; d, Pleopod 1.



*Remarks.*—The until-now monotypic genus *Pendanthura* was represented by *P. tanaiformis* Menzies and Glynn from the Caribbean. The present species agrees closely with the generic diagnosis (Menzies and Glynn 1968:31) and with the type-species (see Kensley, in press, a) especially in the one-segmented mandibular palp, antennal structure, 3-segmented maxilliped with endite, short triangular carpus of the posterior pereopods and the short fused pleon. A few important differences easily separate the two species. These include more elongate posterior pereopods in *P. rarotonga*, a less developed lobe on the propodal palm of pereopod 1, more fringed spines on the inner face of the propodus of pereopod 1, a relatively longer pleon consisting of fused pleonites 1–5, pleonite 6 free, and the lack of strong pigmentation.

Family Paranthuridae

*Paranthura astrolabium*, new species

Figs. 12–13

*Description.*—♀: Integument not indurate, with scattered chromatophores on cephalon, pereon, and pleon. Body proportions:  $C < 1 = 2 = 3 > 4 < 5 > 6 > 7$ . Cephalon with very low rostral point; irregular band of pigment between eyes. Pleonites 1–5 fused, segments indicated laterally; pleonite 6 free, with deep middorsal incision in posterior margin. Telson elliptical/oval.

Antennular peduncle 4-segmented, segment 4 very short; flagellum of 2 articles, terminal article very short. Antennal peduncle 5-segmented, segment 2 grooved to accommodate antennule; flagellum of single shortened and somewhat flattened setose article. Mandibular palp 3-segmented, terminal segment with 7 spines. Maxilla with about 10 distal serrations. Maxillipedal segment 2 with short triangular extension at inner distal angle; segment 3 elongate; 2 distal segments very short, setose. Pereopod 1 unguis of dactylus with oblique suture; propodus expanded, palm with evenly convex ridge on inner surface plus row of 14–16 setae; outer margin of palm straight, with short proximal lobe. Pereopods 4–7 with propodus having 3 serrate sensory spines on posterior margin; carpus roughly triangular, with 2 serrate sensory spines on posterior margin. Pleopod 1 exopod operculiform, with several elongate plumose setae on distal margin; endopod two-thirds length and about one-tenth width of exopod, with 3 distal plumose setae. Uropodal exopod ovoid, reaching beyond end of basis, distal margin serrate, apically acute, with elongate simple setae; endopod reaching slightly beyond telsonic apex, broadly ovate, with elongate simple setae.

*Etymology.*—The specific name, proposed as a noun, is derived from Great Astrolabe Barrier Reef in the Fiji Islands.

*Material.*—Holotype, USNM 172283, ♀, 4.5 mm; Paratype, USNM

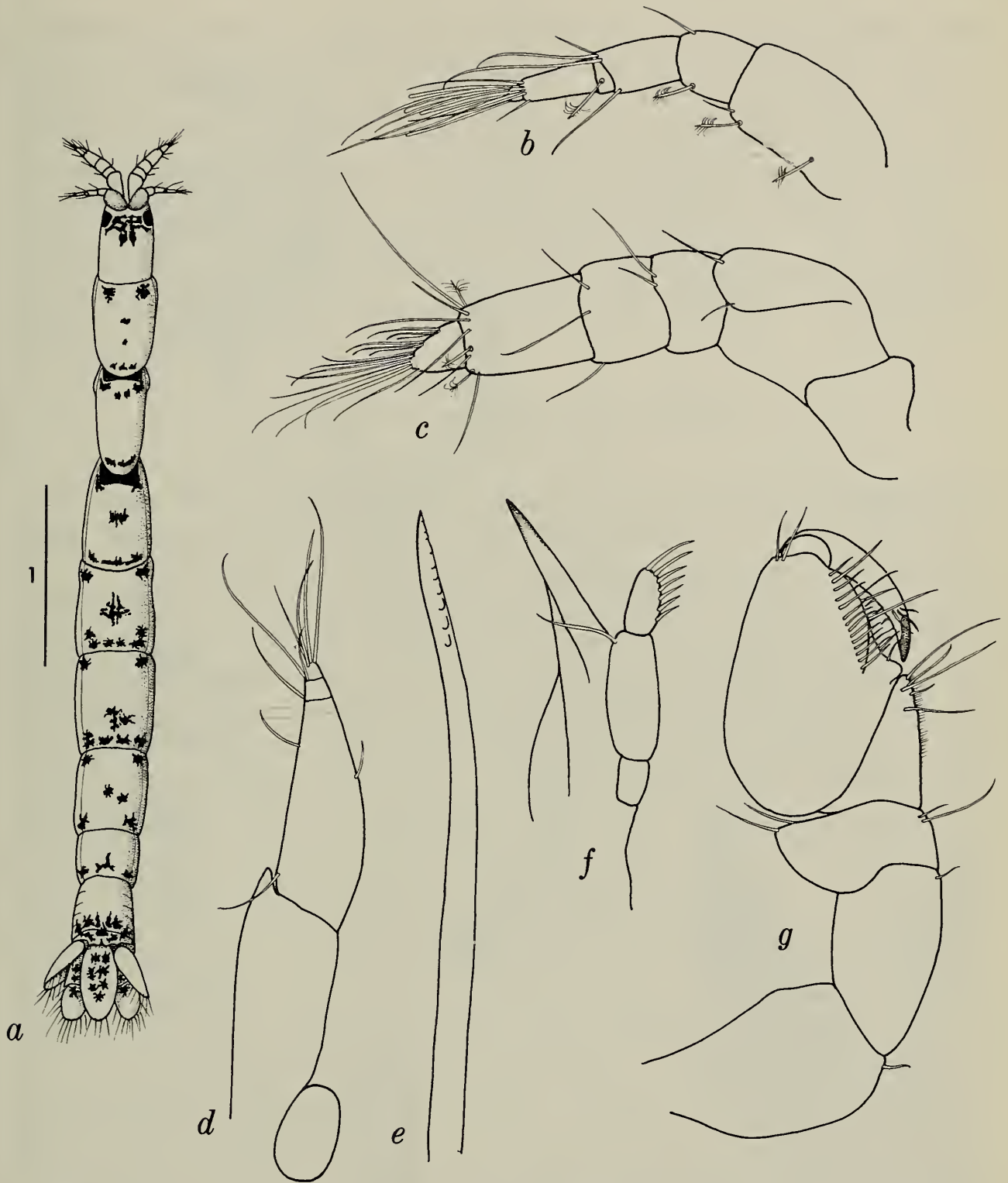


Fig. 12. *Paranthura astrolabium*: a, Female in dorsal view; b, Antennule; c, Antenna; d, Maxilliped; e, Maxilla; f, Mandible; g, Pereopod 1.

172284, ♀, 4.0 mm; Great Astrolabe Barrier Reef, off Ndravuni Is., Fiji Islands; taken from calcareous algal rubble in 5–13 m of water.

*Remarks.*—*Paranthura astrolabium* differs very obviously from *P. polynesica* (described below) from the Cook Islands in size, chromatophore pattern, telsonic and uropodal shape, length and relative proportions of the

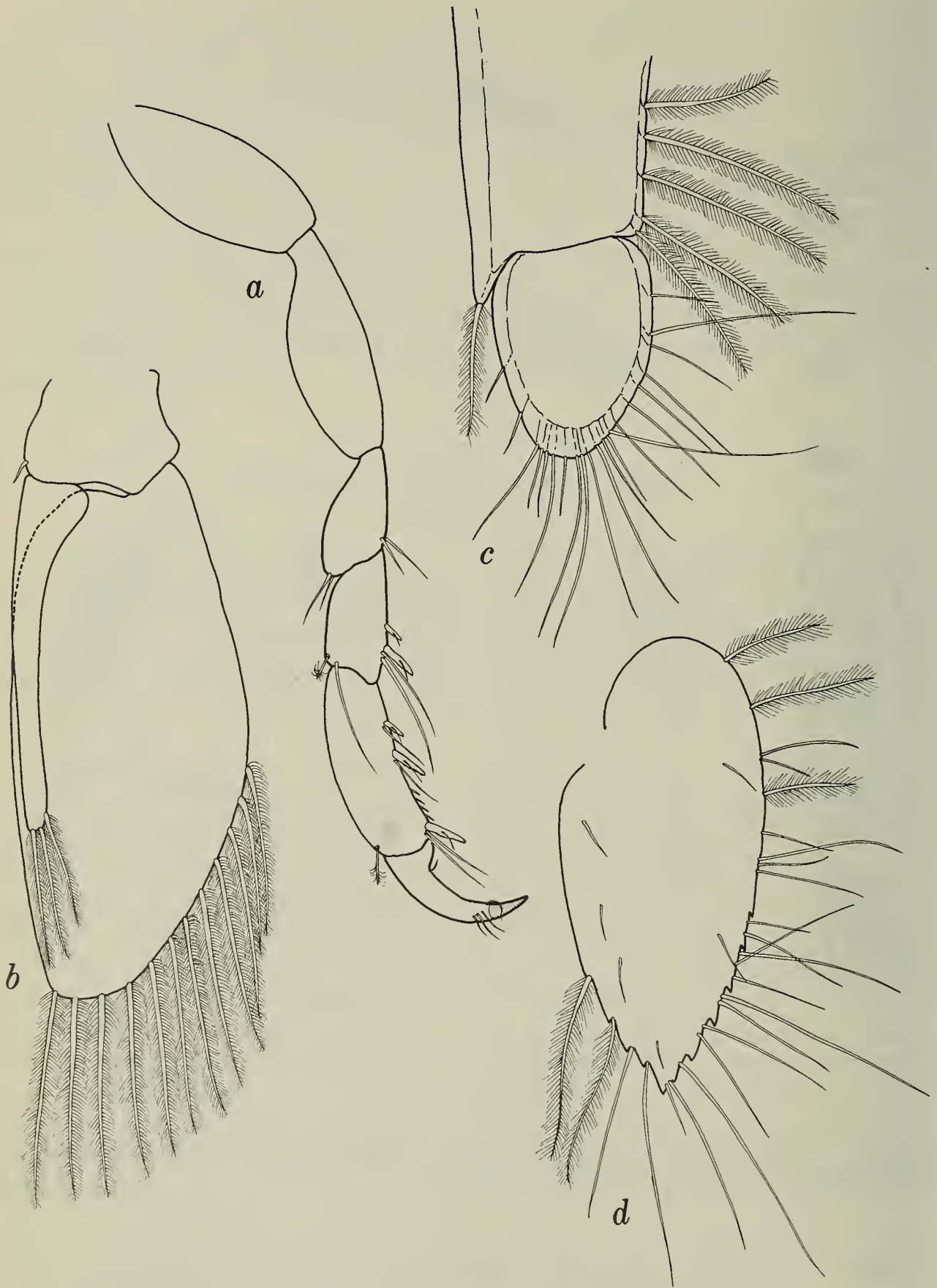


Fig. 13. *Paranthura astrolabium*: a, Pereopod 7; b, Pleopod 1; c, Uropodal endopod and basis; d, Uropodal exopod.

endopod of pleopod 1, and setation/spination of pereopod 1 propodus. There is some similarity to *P. lifuensis* Stebbing, 1900, recorded from the Loyalty Islands, especially in telsonic shape and structure of pereopod 1. The endopod of pleopod 1 appears more elongate and setose in *P. lifuensis*, while the sixth pleonite apparently lacks the deep middorsal incision in the posterior margin as seen in *P. astrolabium*. In this latter feature there is a strong resemblance to *P. ostergaardi* Miller and Menzies, 1952, from Hawaii, but this species has a distally rounded uropodal exopod (acute/dentate in *P. astrolabium*), a more setose palm of pereopod 1, and a more elongate endopod of pleopod 1.

*Paranthura polynesica*, new species

Figs. 14–15

*Description.*—♀: Integument not indurate, with regular arrangement of large chromatophores dorsally. Body proportions:  $C > 1 > 2 = 3 = 4 > 5 > 6 > 7$ . Pleonites 1–5 fused, 6 free, with deep middorsal incision in posterior margin. Telson elongate/rectangular, distally truncate, margin with elongate setae. Antennular peduncle 4-segmented, segment 4 short; flagellum of 3 articles, 2 distal articles very short. Antennal peduncle 5-segmented, segment 2 grooved to accommodate antennule; flagellum of 1 (?2) articles, slightly flattened and setose. Mandibular palp 3-segmented, middle segment twice length of segment 1; terminal segment with 6 fringed spines. Maxilla slender, with 8–10 serrations. Maxilliped 3-segmented, terminal segment elongate, tapering; no tiny distal segments visible. Pereopod 1 propodus expanded, inner palmar margin evenly convex, with 3 proximal fringed spines, outer margin straight, with low triangular proximal process. Pereopods 2 and 3 subchelate, propodus not as expanded as pereopod 1, propodal palm with 5 sensory spines. Pereopods 4–7, propodus with 2 strong sensory spines on posterior margin; carpus roughly rectangular, with sensory spine at posterodistal corner. Pleopod 1 exopod operculiform, with several plumose setae on distal margin; endopod about half length of exopod, elongate/triangular, with 2 short terminal setae. Uropodal exopod reaching to endopod, elongate/oval, outer margin dentate, distally acute; endopod almost circular, with numerous elongate simple setae, just reaching beyond telsonic apex.

*Etymology.*—The specific name is derived from Polynesia, the general descriptive term for the area in which the entire collection was made.

*Material.*—Holotype, USNM 172285, ♀, 2.8 mm, Paratypes, USNM 172286, 3 ♀, 2.0–2.8 mm; Rarotonga Is., Cook Islands; taken from rubble on back reef in 1 m of water; Paratypes, USNM 172287, ♀, 3.1 mm; Mangaia Is., Cook Islands; taken from algal carpet growing on limestone in about 0.5 m of water.

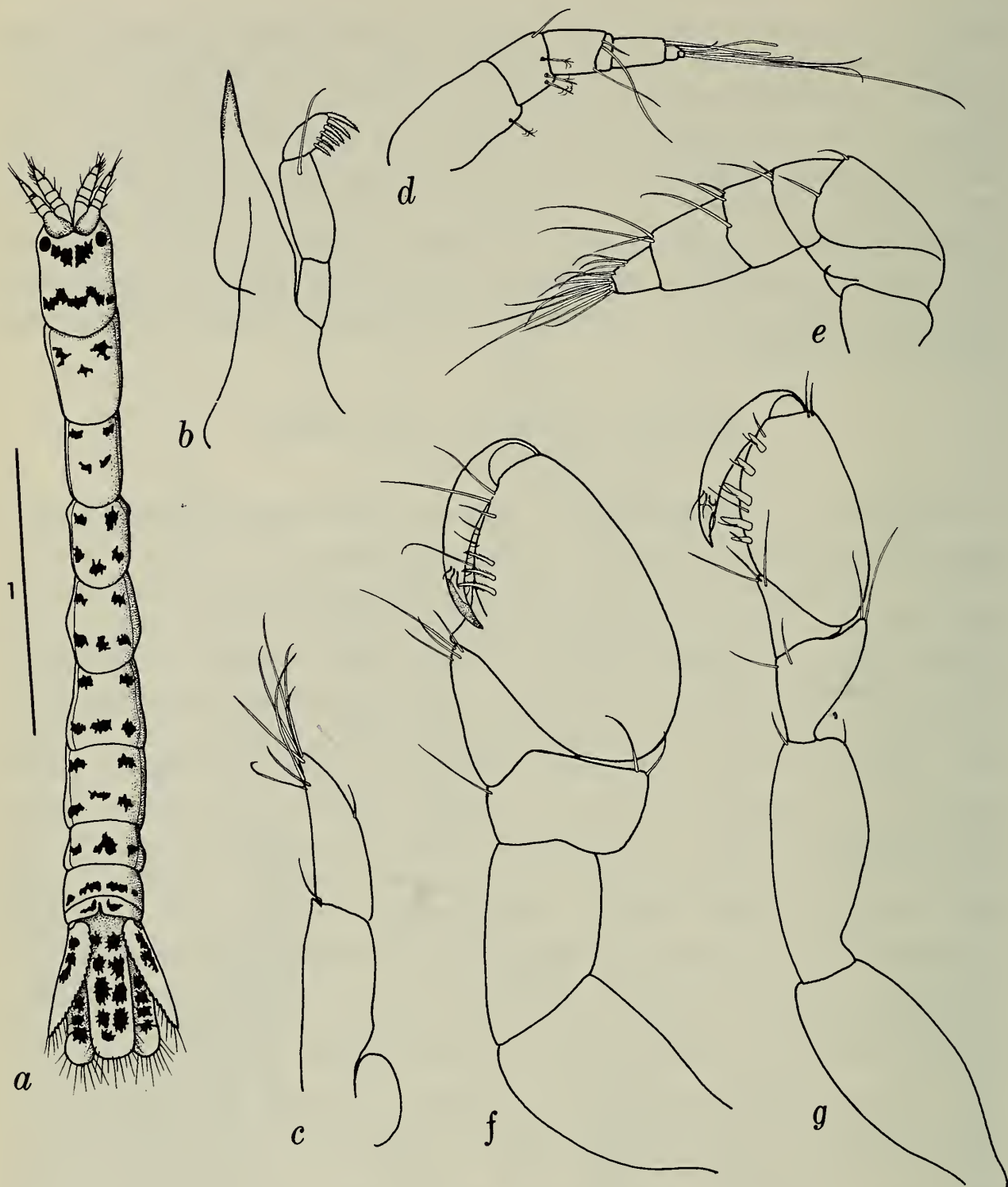


Fig. 14. *Paranthura polynesica*: a, Female in dorsal view; b, Mandible; c, Maxilliped; d, Antennule; e, Antenna; f, Pereopod 1; g, Pereopod 2.

*Remarks.*—*Paranthura* is perhaps the genus most requiring revision amongst all the Anthuridea, and to add two more names to an already daunting list may be regarded as irresponsible. It is necessary, however, to record the presence of species of *Paranthura*, especially from an area rarely collected. To give a new specific name, rather than to hide the material erroneously under an earlier name, or under the non-committal *Paranthura* sp., is preferable.

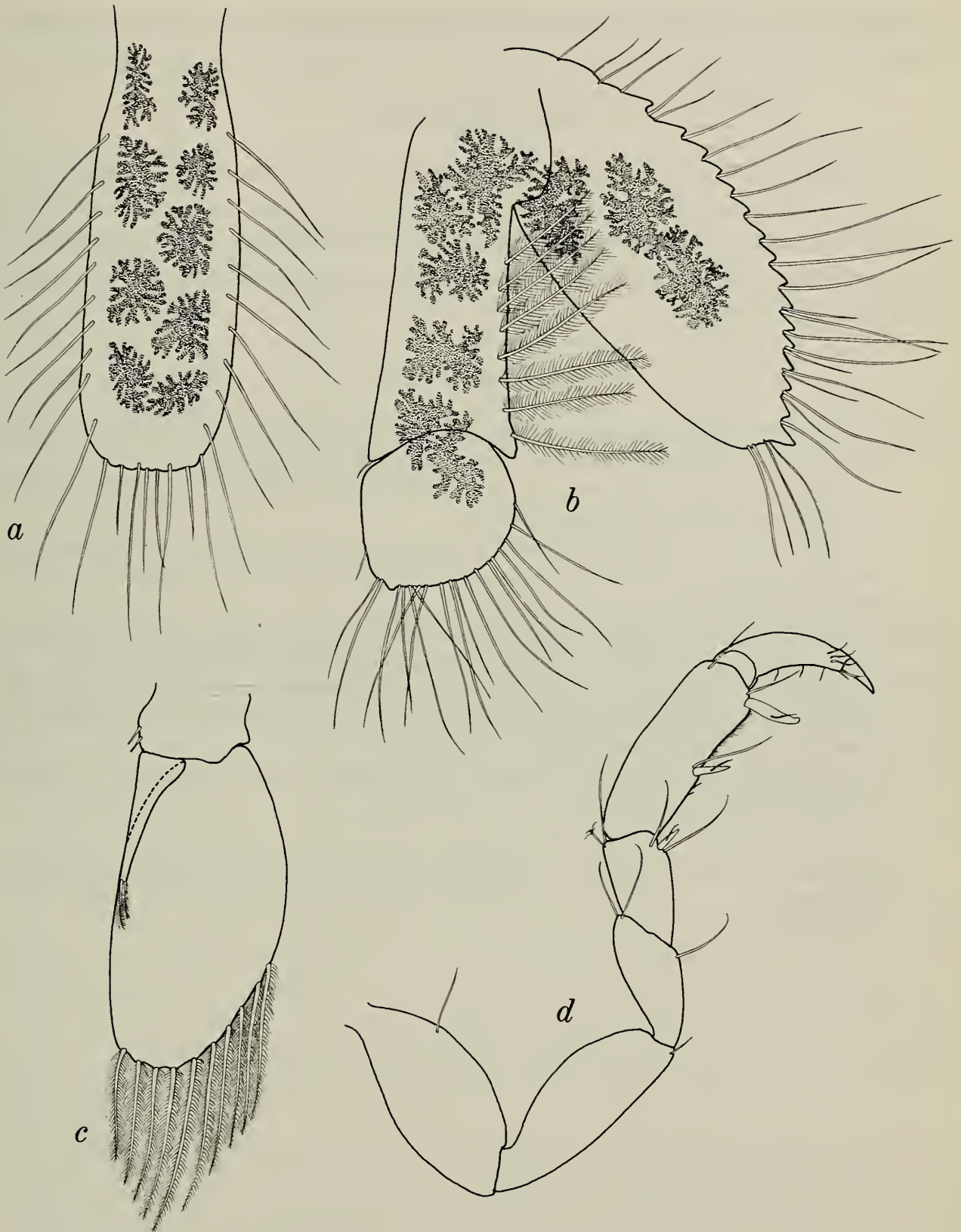


Fig. 15. *Paranthura polynesica*: a, Telson; b, Uropod; c, Pleopod 1; d, Pereopod 7.

*Paranthura polynesica* to some extent resembles *P. bellicauda* Miller and Menzies, 1952, from Hawaii, especially in the truncate telson and dentate uropodal exopod. *P. bellicauda*, however, possesses a much shorter pleon, and a more spinose/setose pereopod 1, and is a larger species (6 mm). Dif-

ferences are also seen in the uropodal endopod and in the relatively broader telson.

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